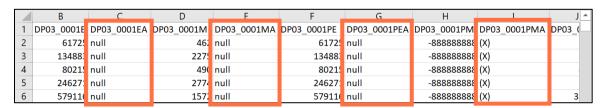
Removing American Community Survey (ACS) Annotation Columns from API Group Call Results in Excel

After <u>using the application programming interface (API) to get all results for an ACS table</u>¹, you will notice that each variable has another column with a similar label that ends in A, shown in the screenshot below. These columns that end in A are annotation columns that are used to denote special characters rather than numerical values. Oftentimes, they are not applicable and will contain null values, but in some cases, they will contain special values such as (X), +, or *. For a detailed listing of annotation values and descriptions, see the <u>notes on ACS estimate and annotation values</u>² webpage.

Depending on the ACS data year you are working with in the API, annotation columns may be intermingled with your API results as shown below, or they may appear in a set of columns at the end.

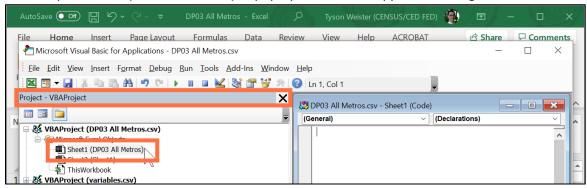


API Group Call Results in .CSV format for the 2019 ACS 1-Year Estimates, DP03 for all metro/micro statistical areas3

If you would like to remove the annotation columns from your results in Excel, follow these easy steps:

Step 1: Create a Macro

- Press **Alt+F11** to open Microsoft Visual Basic for Applications.
- On the left side of the screen, look for the Project Explorer window, labeled "Project –
 VBAProject." It may appear by default or you may need to press Ctrl + R to open it manually.
- In the Project Explorer window, double-click the worksheet that contains annotation columns, for example, **Sheet1 (DP03 All Metros)**. A pop-up window will appear to the right.



¹ https://www.census.gov/library/video/2020/using-api-all-results-for-acs-table.html

³ https://api.census.gov/data/2019/acs/acs1/profile?get=NAME,group(DP03)&for=metropolitan%20statistical%20area/micropolitan%20statistical%20area:*



² https://www.census.gov/data/developers/data-sets/acs-1year/notes-on-acs-estimate-and-annotation-values.html

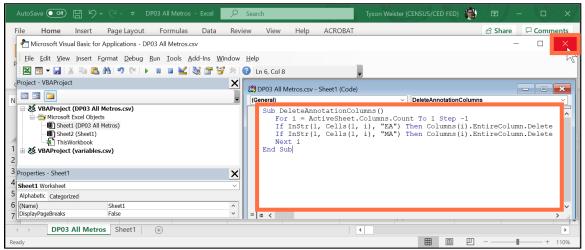
Step 2: Input Macro Code

• Paste this code in the pop-up window labeled "DP03 All Metros.csv – Sheet1 (Code)."

```
Sub DeleteAnnotationColumns()
For i = ActiveSheet.Columns.Count To 1 Step -1
If InStr(1, Cells(1, i), "EA") Then Columns(i).EntireColumn.Delete
If InStr(1, Cells(1, i), "MA") Then Columns(i).EntireColumn.Delete
Next i
End Sub
```

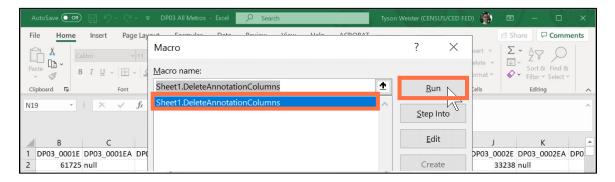
The code tells Microsoft Excel to look at the content in the first row. When it finds data variables that contain "EA" or "MA," the code tells Excel to delete the entire column. This will remove all annotation columns.

After pasting the code, click the X in the upper right to close Visual Basic.



Step 3: Run the Macro

- Press Alt+F8 to open the macro dialog box.
- Confirm your desired macro is highlighted: **Sheet1.DeleteAnnotationColumns**.
- Click Run to run the code that will delete the annotation columns.





Step 4: View Results

Annotation columns are removed from your results.

	В	С	D	Е	F	G	Н	1	J 🔺
1	DP03_0001E	DP03_0001M	DP03_0001PE	DP03_0001PM	DP03_0002E	DP03_0002M	DP03_0002PE	DP03_0002PM	DP03_0003E
2	61725	462	61725	-888888888	33238	1975	53.8	3.2	33088
3	134883	2275	134883	-88888888	82595	2670	61.2	1.9	77557
4	80215	490	80215	-888888888	46591	1765	58.1	2.1	46582
5	246271	2774	246271	-88888888	91522	4530	37.2	1.9	91197
6	579116	1572	579116	-88888888	374176	5726	64.6	1	373151
7	53816	769	53816	-88888888	27585	1988	51.3	3.5	23452
8	116771	2057	116771	-88888888	66046	3049	56.6	2.5	65732
9	105687	779	105687	-88888888	62875	2450	59.5	2.3	62663
10	731319	1457	731319	-88888888	475302	6592	65	0.9	473138
4	DP03	All Metros S	heet1 +			: 4)

Issued April 2021

